27 Aug 01

DEPARTMENT OF THE AIR FORCE
Aerospace Basic Course (AETC)
Maxwell Air Force Base, Alabama 36112

LESSON PLAN

A1640, TARGET IDENTIFICATION EXERCISE

CONTENTS

RECORD OF CHANGES

CHANGE NUMBER	REMARKS
New Lesson Plan	Supercedes ABC lesson 1360 dated 7 Aug 00

SUMMARY OF CHANGES

.

EDUCATIONAL GOALS

A1000 Area Objective: Apply aerospace power capabilities and officership principles to warfighting.

A1600 Phase Objective: Comprehend how Joint aerospace operations are planned and executed at the theater/operational and tactical levels.

A1640 - TARGET IDENTIFICATION EXERCISE

Lesson Objective 1: Comprehend how to use the principle of effects-based targeting and the methods of targeting to achieve desired effects.

Samples of Behavior:

(S) 1.1 - Using Warden's Five-Ring Model, identify an enemy system's Centers of Gravity.

(S) 1.2 - Defend the significance of selections as Centers of Gravity.

(S) 1.3 - Using Dr. Strange's Model, identify target sets which, if affected, can produce desired effects upon the selected Centers of Gravity.

(S) 1.4 - Defend the significance of selected target sets.

(S) 1.5 - Using Nodal Analysis, identify targets which, if affected, can produce desired effects upon a target set.

(S) 1.6 - Defend the significance of selected targets.

Lesson Description: This lesson is a hands-on student role-playing exercise that gives students an opportunity to use the models they learned in A1620, Methods of Targeting. Students play the part of enemy military leaders planning a strike against the United States. Students begin with pre-determined Centers of Gravity, which they then further analyze using Warden's Five-Ring Model and/or Dr. Strange's Model. Once students decide on target sets, they may use Nodal Analysis to select targets for the target list. This lesson emphasizes the importance of properly choosing only those targets that will

achieve desired effects. In addition, this lesson also demonstrates the value of understanding how enemies might view our nation, so we can best defend it.

Prerequisites: A1620, Methods of Targeting

Preparation: Review A1620, Methods of Targeting.

Optional: N/A

Rationale/Linkage: This lesson belongs to the A1600 Phase of instruction, which focuses on Joint aerospace operations planning and execution at the theater/operational and tactical levels. In A1610, The JAOP, students learn how aerospace operations are planned at the theater/operational level. In A1620, Methods of Targeting, students learn how "targeteers" translate operational plans into lists of enemy Centers of Gravity, target sets, and targets. In this hands-on student role-playing exercise, students have the opportunity to use the models they learned in A1620, Methods of Targeting. This exercise helps students understand how aerospace operations achieve objectives and prepares them for the A1700 Phase--Blue Thunder.

INSTRUCTIONAL PLAN

1. **TITLE AND LENGTH OF SEMINAR:** Target Identification Exercise (1:15)

2. **RELATION TO OTHER INSTRUCTION:** This lesson belongs to the A1600 Phase of instruction, which focuses on Joint aerospace operations planning and execution at the theater/operational and tactical levels. In A1610, The JAOP, students learn how aerospace operations are planned at the theater/operational level. In A1620, Methods of Targeting, students learn how "targeteers" translate operational plans into lists of enemy Centers of Gravity, target sets, and targets. In this hands-on student role-playing exercise, students have the opportunity to use the models they learned in A1620, Methods of Targeting. This exercise helps students understand how aerospace operations achieve objectives and prepares them for the A1700 Phase--Blue Thunder.

3. **GENERAL METHOD OF INSTRUCTION:**

   a. **Presentation Method:** Student role-playing exercise.

   b. **Time Outline:**

Segment Time	Total Time	Description
0:05	(0:05)	Introduction
0:05	(0:10)	MP I: Background Information
0:45	(0:55)	MP II: Targeting Exercise
0:15	(1:10)	MP III: Debrief
0:05	(1:15)	Conclusion

   c. **Instructor Preparation:**

   - Review the lesson plan.
   - Review A1620, Methods of Targeting.

   d. **Instructional Aids/Handouts:**

   - Slides

- A1640-HO1, Situation Overview and Background Information
- A1640-HO2, Team 1 Target Selection Worksheet
- A1640-HO3, Team 2 Target Selection Worksheet
- A1640-HO4, Team 3 Target Selection Worksheet

e. Student Preparation:

- Review A1620, Methods of Targeting.

f. Strategy: This lesson is a student role-playing exercise. In the motivation step, emphasize the importance of properly choosing only those targets that will achieve the desired effects. In the overview, emphasize that this lesson will be a hands-on role-playing exercise that will give students an opportunity to use the models they learned in A1620, Methods of Targeting. **<u>There are roles for the students to play, and it is vital that students take them seriously.</u>** The first main point focuses on the role of the flight commander, the students, and background information. The second main point is the targeting exercise itself. The third main point is a debrief of the targeting exercise. Discuss what students accomplished and get student feedback on their experience in working through the exercise. If necessary, have students from each group use the white board to explain their target selections. Finally, wrap up the lesson by reminding students that campaign planners need to know how to use different methods of targeting in order to apply aerospace power properly and to achieve military objectives through effects-based targeting. In addition, we need to understand how enemies might view our nation, so we can best defend it.

g. References: N/A

4. **DETAILS OF INSTRUCTION**:

   a. **Introduction:** 0:05 (0:05)

      1) //Attention//

General Douglas MacArthur once said, "In war, you win or lose, live or die--and the difference is just an eyelash." With today's tools for waging war, that difference--that eyelash--is very thin and frail. Given the constraints we must deal with, both external and self-imposed, we, the US military, cannot afford to expend efforts frivolously or make mistakes.

      2) //Motivation//

Airmen risk their lives getting bombs on target. When planning a campaign, it's absolutely critical to select the best targets possible. Every target struck must contribute to achieving campaign objectives. If the target doesn't meet this standard, we would risk the lives of airmen for nothing.

      3) //Overview//

I'll begin the lesson with an introduction to the situation of our exercise. You'll be divided into three groups and have 45 minutes to complete the exercise. This exercise is not scored in any way. It will give you the opportunity to practice the methods of targeting you learned in A1620. After you complete the exercise, we'll discuss the outcome.

   b. **MP I: Background Information:** 0:05 (0:10)

*{**Instructor Note:** It's important to have the flight divided into three groups and ready to proceed. Team 1 should consist of five students, Team 2--four students, and Team 3--four students. (Team 1 should have five students because it will have the most difficult assignment.) First, you need to identify your role and the role of the students.}*

[SLIDE]

Role-playing is an important part of this exercise. We are going to be executive members of the government of a fictitious country called Argos. I will be playing the part of the ruling monarch. You will be playing the part of the Aerospace Plans Division of the Argos Board of Military Expansion. Our nation is currently in the middle of a military and political campaign in the Gulf of Mexico, Central America, Cuba, and South America.

[SLIDE]

*{**Instructor Note:** Pass out three copies (one per team) of A1640-HO1, "Situation Assessment and Background Information." Before continuing, read the sheets aloud as the students follow along. Conduct the rest of the exercise by playing the role of the monarch. Effective role-playing will help the flight make the most of the available time. Remember: Many of the details in the following three paragraphs are vital to the scenario.}*

[SLIDE]
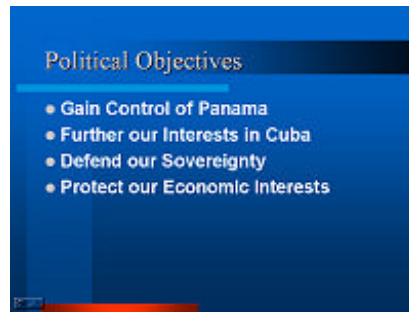
As the leader of Argos, I envision continuing our tradition of extending our power and influence over other lands. We can exploit our geographic and economic power. Cuba is looking to us for support, both militarily and economically, since the fall of the Soviet empire. We can also sway the government of Haiti with economic aid--and if that fails, by intimidation. I have recently consulted certain South American drug cartels who are willing to pay us handsomely for open access to our shipping lines. Along with our profits from the South American underworld, this economic boost will strengthen our efforts to secure our main objective: Panama.

Our previous raid into the Canal region was successful. It has, however, caught the attention of the United States. Our engagements with them, as well as the implications of our occupation of Panama, gives them reason to push us out. We had hoped to avoid conflict with the Americans, but will be unable to complete the occupation without it.

[SLIDE]

The US is assembling a coalition to retaliate. They will most certainly feel we are a major threat if we control Cuba, the Canal, and much of South America. They will not let us seize this territory easily. I am afraid we cannot wait to defend our

interests and our borders from this force, especially since we have no weapons of mass destruction. We will therefore pursue a course of surprise attack that will render the Americans incapable of threatening us immediately. If properly conducted, these surprise attacks could also sway the American public into thinking the prize of Panama is not worth the bloody conflict required to win it. We do not want to get into a drawn-out conflict with the Americans.

Don't forget that the plan we choose will place our Argonian sons and daughters in harm's way, so choose only those targets necessary to produce the desired effects.

(TRANSITION): NOW THAT YOU HAVE AN IDEA OF THE CURRENT SITUATION AND YOUR OVERALL MISSION. YOU WILL FIND THE SPECIFIC INSTRUCTIONS FOR YOUR TEAM ON THESE SHEETS.

    c. **MP II: Targeting Exercise:** 0:45 (0:55)

[SLIDES]
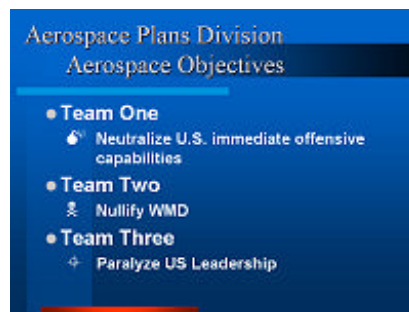
{Instructor Note: Give each team a copy of the proper "Target Selection Worksheet": A1640-HO2 to Team 1, A1640-HO3 to Team 2, and A1640-HO4 to Team 3. Again, be sure Team 1 has the most students, since they have the most difficult assignment and need the extra help.}

For this exercise, you have approximately 45 minutes to produce lists of targets. Each team has a campaign objective and a Center of Gravity. The three teams' objectives each support the national and military objectives. Use the various methods of targeting and apply the principle of effects-based targeting. I'll monitor your progress and answer questions, but I want you to do the planning and critical thinking.

{Instructor Note: Use your judgment in offering assistance to the teams. Don't do their work for them--inspire them to come up with their own solutions.

If the students are having difficulty starting, or if they're on the wrong track, consider giving them a "strategy statement" similar to the following suggestions:

Team 1: Strategy: Deny US retaliation by tactical air strikes.
Team 2: Strategy: Defend our borders from long-range US bombers.
Team 3: Strategy: Immobilize US leadership.}

(TRANSITION): YOU HAVE ALL COMPLETED YOUR TARGET SELECTION LISTS. NOW, EACH TEAM WILL HAVE AN OPPORTUNITY TO EXPLAIN HOW YOU REACHED YOUR FINAL TARGET SELECTIONS.

    d. MP III: Debrief: 0:15 (1:10)

{Instructor Note: Use this time to review the students' target selection lists. Each group should present how they completed their target selections. Using the questions below, discuss any areas they may not have considered. There are no set answers to measure their target selections against, but you should be evaluating the depth of your students' understanding of effects-based targeting and the various methods of targeting.}

LEAD OFF QUESTION (LOQ): Explain how the targets you selected will result in achieving the campaign objectives.

ANTICIPATED RESPONSE (AR):
- Numerous responses anticipated
- Ensure they properly applied the concept of effects-based targeting

FOLLOW UP QUESTION (FUQ): Which methods of targeting did you find the most useful?

AR:
- Be sure students explain their responses:
  - Warden's Five Rings, because. . .
  - Dr. Strange's Model, because. . .
  - Nodal Analysis, because. . .

FUQ: Did you abide by the Rules of Engagement (ROE) and the Laws of Armed Conflict (LOAC)? Would you have to remove any targets from your list due to either the ROE or the LOAC? Explain.

AR:
- Many responses are possible.

FUQ: Do you think that campaign planners have an easy time anticipating what effects will be produced by attacking selected targets? Why or why not?

AR:
- No. It is difficult to anticipate what effects might be produced.

FUQ: Do you believe the targets you selected will have the desired psychological effect against the hostile will of the enemy? Why or why not?

AR:
- Many responses are possible.
- Students should draw conclusion that the physical destruction of certain targets should have a demoralizing psychological effect.
- However, students should also realize how such attempts can "backfire": People may be inspired to seek vengeance for these targets being struck

FUQ: What could be the benefits of targeting friendly systems as well as the enemy's--as we have done in today's exercise?

AR:
- Identifying friendly COGs increases our awareness of our own systems.
- Helps us position defenses better.
- Knowing our weakness helps us overcome them.

FUQ: Do you think that effects-based targeting is more like an art, or more like a scientific exercise? Why?

AR:
- Many responses are possible; let students discuss their points of view.

e. Conclusion: 0:05 (1:15)

    1) //Summary//

We started off the lesson with some background material and guidance. You then had the opportunity to complete a hands-on targeting exercise resulting in a list of targets. Finally, each group explained why they selected targets and which methods of targeting they used. We also discussed why it's beneficial to turn the tables and see ourselves as others might see us--especially enemies.

    2) //Remotivation//

Remember: In past wars, many fine airmen have died attempting to put bombs on targets. It's your job to make sure we put only the best targets on the target list.

    3) //Closure//

Without educated airmen who understand aerospace power and effects-based targeting, all of our great technology is a mere heap of metal sitting on the flightline or floating through space.

SITUATION OVERVIEW AND
BACKGROUND INFORMATION

Nation of Argos

- Economy ranks in the world's top ten. Most of the gross domestic product comes from worldwide import and export businesses capitalizing on Argos' optimal location in Atlantic shipping lanes. Argos also has modest on-land and offshore oil drilling operations.

- The population is approximately 150 million. The nation is a melting pot of mixed ethnic backgrounds and religions. The overall attitude and behavior of the population is rugged and ruthless, but the people have an intense bond with their fellow countrymen, as long as they are united against a common enemy.

- The government is a moderately aggressive monarchy. The nation has spent the last hundred years seizing control of smaller nations. Often, Argos would lend assistance by way of economic support or access to shipping lanes. Argos would then gain power over these nations when the debtor could not repay. In some cases, Argos forgave the debts only after being granted the right to establish military bases in the debtor nation. In other cases, Argos toppled the debtor governments and set up puppet regimes in their places.

- Argos is not a member of NATO, the UN, or the Organization of Atlantic States, but is not currently considered a major threat by these organizations.

- The nation of Argos has recently allied itself with Cuba and is pursuing diplomatic relations with Haiti. In addition, the nation is aiding drug trafficking operations in South America.

Argos Military Forces

- World's 4th largest military force, comprised of modern forces. In technology and capabilities, most weapon systems are comparable to NATO systems.

- Does not have nuclear, biological, or chemical weapons in the current inventory.

- Elite Special Forces units can operate in any environment and are well trained to blend in with other cultures in other countries. These units are extremely tenacious and will stop at nothing to achieve their objectives.

Argos Board of Military Expansion

- This board is designed to pursue national objectives of Argos regarding expansion into foreign lands. The Board operates in an advisory capacity. Its recommendations are often carried out in full, but the reigning monarch has ultimate decision-making power.

- The Board has most recently sought domination of Panama--most particularly, control of the Panama Canal.

- Approximately 2 months ago, the board organized a military campaign to occupy the Panama Canal and pursue conquering the entire nation in the future.

- Argonian military forces found little resistance from the Panamanian Army. There were some engagements with United States military forces, but these were limited.

- The Board has anticipated and is planning for a retaliatory strike by the US, which until now has concentrated its efforts on fortifying positions in Panama in preparation for a coalition effort to push Argos out of Panama. Of the many options prepared by the Board, the monarch has decided to conduct a pre-emptive offensive assault on the continental US, in an attempt to catch the Americans off guard.

- The Board has divided into three separate groups to formulate a strategy which will best render the United States incapable of waging war. The three Centers of Gravity the Board has identified are the offensive capabilities of US military forces, US Weapons of Mass Destruction (WMD), and US leadership.

- The Board is currently analyzing these Centers of Gravity to determine the Critical Requirements and Critical Vulnerabilities for each and produce a list of target sets.

MAP OF ARGOS/ATLANTIC REGION
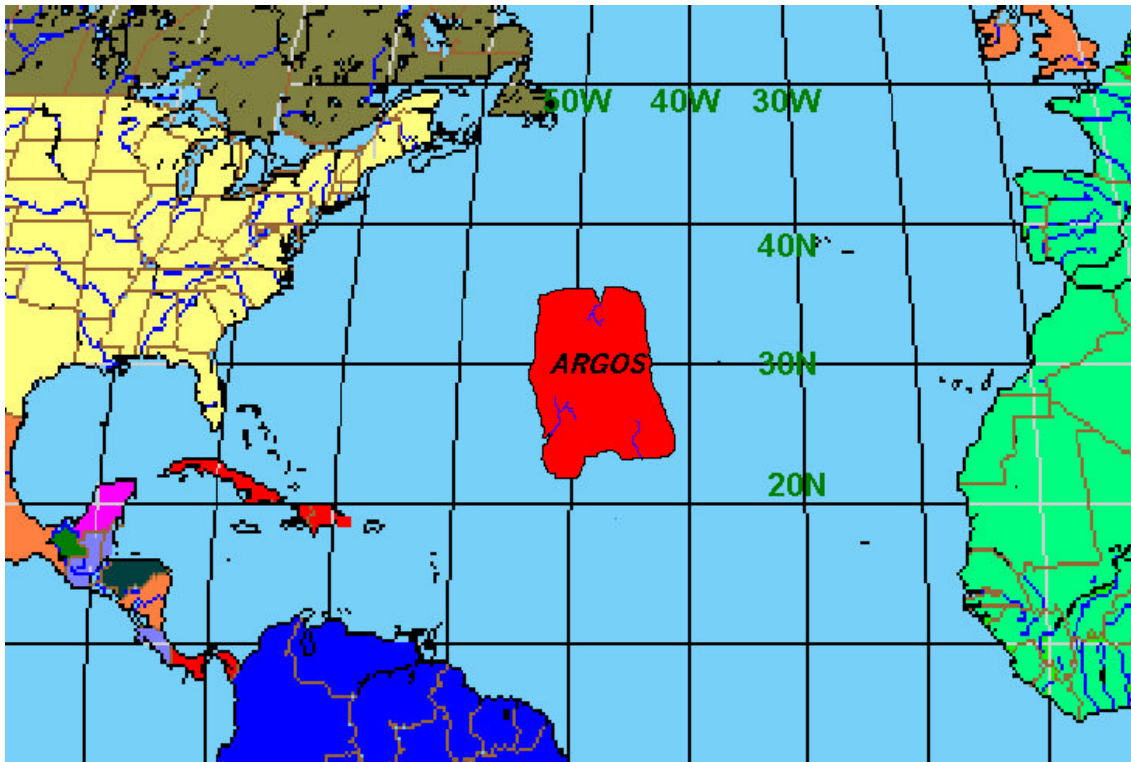
TARGET SELECTION WORKSHEET
(Team 1)

Aerospace Power Objective: Neutralize U.S. immediate offensive capabilities.

1. Evaluate your objective. Determine what is meant by "neutralize."

2. Analyze this Center of Gravity using Warden's Five-Ring and/or Dr. Strange's Model. You are given the Critical Capabilities for this Center of Gravity, below.

3. Use your knowledge or public resources to determine the Critical Requirements and Critical Vulnerabilities for this Center of Gravity. Then, identify target sets.

Dr. Strange's Model

Center of Gravity (CG) – Military Forces
- Critical Capability (CC) 1: Locate Targets
  - Critical Requirement (CR) 1:

- CC2: Plan Attacks
  - CR2:

- CC3: Attack/Affect Targets
  - CR3:

- CC4: Survive and Recover
  - CR4:

- Critical Vulnerabilities (CV) or Target Sets
  -
  -
  -
  -
  -
  -
  -
  -

TARGET LIST--Team 1

Priority	Target Description	Priority	Target Description
1		26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

TARGET SELECTION WORKSHEET
(Team 2)

Aerospace Power Objective: Nullify US Weapons of Mass Destruction (WMD).

1. Evaluate your objective. Determine what is meant by "nullify."

2. Analyze this Center of Gravity using Warden's Five-Ring and/or Dr. Strange's Model. You are given the Critical Capabilities for this Center of Gravity, below.

3. Use your knowledge or public resources to determine the Critical Requirements and Critical Vulnerabilities for this Center of Gravity. Then, identify target sets.

Dr. Strange's Model

Center of Gravity (CG) – WMD
- Critical Capability (CC) 1: Deter/Influence
  - Critical Requirement (CR) 1:

- CC2: Project Power
  - CR2:

- Critical Vulnerabilities (CV) or Target Sets
  -
  -
  -
  -
  -
  -
  -
  -

TARGET LIST--Team 2

Priority	Target Description	Priority	Target Description
1		26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

TARGET SELECTION WORKSHEET
(Team 3)

Aerospace Power Objective: Paralyze United States leadership.

1. Evaluate your objective. Determine what is meant by "paralyze."

2. Analyze this Center of Gravity using Warden's Five-Ring and/or Dr. Strange's Model. You are given the Critical Capabilities for this Center of Gravity, below.

3. Use your knowledge or public resources to determine the Critical Requirements and Critical Vulnerabilities for this Center of Gravity. Then, identify target sets.

Dr. Strange's Model

Center of Gravity (CG) – U.S. Leadership
- Critical Capability (CC) 1: Survive
  - Critical Requirement (CR) 1:

- CC2: Stay Informed
  - CR2:

- CC3: Communicate, govern/command
  - CR3:

- CC4: Influence
  - CR4:

- Critical Vulnerabilities (CV) or Target Sets
  -
  -
  -
  -
  -
  -
  -
  -

TARGET LIST--Team 3

Priority	Target Description	Priority	Target Description
1		26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	